



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,848	02/24/2004	Peter Gernold	13906-184001 / 2003P00962	9474
32864 7590 06/22/2009 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER ZELASKIEWICZ, CHRYSTINA E	
			ART UNIT 3621	PAPER NUMBER
			NOTIFICATION DATE 06/22/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

DETAILED ACTION

Status of Claims

1. This action is in reply to the amendment filed on March 13, 2009.
2. Claims 27-31 have been added.
3. Claims 7-9, 16-18, and 20-24 have been canceled.
4. Claims 1-6, 10-15, 19, and 25-31 are currently pending and have been examined.

Claim Rejections - 35 USC § 112, 2nd paragraph

5. In light of Applicant's amendments, the former rejections are withdrawn.

Claim Rejections - 35 USC § 101

6. In light of Applicant's amendments, the former rejection is withdrawn.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 10-15, 19, and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bracho et al. (US 5,870,605) in view of Blankesteijn (US 2002/0165724).

Claims 1, 10, and 19

9. Bracho discloses the following limitations:
 - a. receive a user input (subscription) identifying, from among multiple publications, a publication that identifies a type of data (event type) to be distributed to data sites (subscribers) (abstract, C8 L38-51);

- b. receive a user input (subscription) identifying a distribution criterion (filter indicating certain values in certain fields) that defines the basis upon which the type of data identified by the publication (event type) is to be distributed to the data sites (subscribers), the distribution criterion comprising a query (expression string) executable against portions of application data (abstract, C8 L38-51, C11 L23-52);
 - c. store, as information to be used by a subscription generator for the publication, information associating the publication that identifies the type of data to be distributed with the distribution criterion (all input and output) for use in generating data subscriptions in a network (hub) of distributed computer systems operating an application program having application data of various data types (C10 L26-30);
 - d. access information (event and attributes) for the subscription generator including the information associating the publication with the distribution criterion including the query (C6 L1-67, C10 L26-30);
 - e. execute, based on the accessed information for the subscription generator, the query (expression string) against portions of the application data (incoming flow of events) to generate a list of subscriptions (list of subscriptions) for the publication (AdSource) associated with the subscription generator (C11 L23-52, C12 L30-45, C14 L58 – C15 L5);
 - f. generate data subscriptions for the publication associated with the subscription generator based on the modified list of subscriptions (C8 L38-51, C11 L23-52, C14 L26 – C16 L67);
 - g. automatically assign (sends the event to the matching subscriber) data sites to the generated data subscriptions based on the application data (C8 L38-51, C11 L23-52, C14 L26 – C16 L3).
10. Bracho does not disclose the following limitations:
- h. modify... query;
 - i. send replication messages... subscriptions.
11. Blankesteyn discloses the following limitations:

- j. modify (change), based on generation parameters associated with the subscription generator, the list of subscriptions (data objects) generated based on execution of the query (abstract, P0017-0018, 0055, 0071);
 - k. send replication messages (a push notification and/or publish/subscribe notification) that distribute portions of the type of data identified by the publication associated with the subscription generator based on the assignment of data sites (recipients) to the generated data subscriptions (P0073, 0095).
12. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyjn because 1) a need exists for a new form of data change integration mechanism (Blankesteyjn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Modifying the list of subscriptions and sending replication messages will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claims 2 and 11

13. Bracho, in view of Blankesteyjn, discloses the limitations above. Furthermore, Bracho discloses the following limitations:
- l. the type of data to be distributed to data sites comprises a business object type ("SalesOrder" events) (C6 L19-20).

Claims 3 and 12

14. Bracho, in view of Blankesteyjn, discloses the limitations above. Furthermore, Bracho discloses the following limitations:
- m. the type of data to be distributed to data sites comprises a publication (C5 L9-11).

Claims 4 and 13

Art Unit: 3621

15. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Bracho discloses the following limitations:

- n. the distribution criterion comprises an attribute (event attribute names) of the type of data to be distributed (C11 L23-52).

Claims 5 and 14

16. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Blankesteyn discloses the following limitations:

- o. the distribution criterion comprises a distribution criterion based on a relationship (status) of data with an employee (employee) that uses a data site (P0042, 0072).

17. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Blankesteyn to show a distribution criterion based on a relationship of data with an employee that uses a data site because Blankesteyn already teaches a status of an employee (P0042, 0072). A suggestion exists to have the distribution criterion based on a relationship of data with an employee that uses a data site because a status of the employee can represent his relationship of data (e.g. active, inactive).

18. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyn because 1) a need exists for a new form of data change integration mechanism (Blankesteyn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Having a distribution criterion based on a relationship of data with an employee will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claims 6 and 15

19. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Blankesteyn discloses the following limitations:

p. the distribution criterion comprises a distribution criterion based on a responsibility (status) of an employee (employee) that uses a data site (P0042, 0072).

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Blankesteyn to show a distribution criterion based on a responsibility of an employee that uses a data site because Blankesteyn already teaches a status of an employee (P0042, 0072). A suggestion exists to have the distribution criterion based on a responsibility of an employee that uses a data site because a status of the employee can represent his responsibility (e.g. active status represents certain responsibilities).

21. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyn because 1) a need exists for a new form of data change integration mechanism (Blankesteyn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Having a distribution criterion based on a responsibility of an employee will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claim 25

22. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Bracho discloses the following limitations:

q. receiving a user input identifying a distribution criterion that defines the basis upon which the type of data is to be distributed to the data sites further comprises receiving user input (subscription) identifying multiple criteria attributes (various types of content filters) that are linked for purposes of generating data subscriptions (C8 L38-51, C11 L23 – C12 L45); and

r. executing the query against portions of the application data further comprises:

s. identifying attribute values (e.g. customer location) of each of the multiple criteria attributes for the type of data to be distributed to data sites (subscribers) (C8 L38-51, C11 L23 – C12 L45, C15 L6-25);

- t. executing a query (expression string) against portions of the application data to identify at least one result (event) that matches all of the identified attribute values (match certain criteria) of each of the multiple criteria attributes for the type of data to be distributed to data sites (C8 L38-51, C11 L23 – C12 L45).

Claim 26

23. Bracho, in view of Blankesteyjn, discloses the limitations above. Furthermore, Bracho discloses the following limitations:

- u. the distribution criterion (filter) further comprises data defining relationships between database tables (data structures) that store the application data (figures 6, 10, 12, C11 L23 – C12 L45);
- v. automatically assigning data sites to the generated data subscriptions based on the application data further comprises traversing, using the data defining relationships between database tables that store the application data, multiple database table structures (data structures) to identify the at least one of the data sites (subscriber - hub) to which the type of data is to be distributed (figures 6, 10, 12, C8 L38-51, C11 L23 – C12 L45, C14 L26 – C16 L3).

Claim 27

24. Bracho, in view of Blankesteyjn, discloses the limitations above. Furthermore, Blankesteyjn discloses the following limitations:

- w. accessing at least one generation parameter that indicates at least one employee (employee) to exclude (delete) in generating subscriptions for the publication (P0042, 0123-0131);
- x. accessing at least one generation parameter that indicates at least one employee (employee) to include (insert) in generating subscriptions for the publication (P0042, 0123-0131);
- y. ignoring the distribution criterion by:

z. removing the at least one employee to exclude in generating subscriptions for the publication (publication) from the list of subscriptions generated based on execution of the query (P0135);

aa. adding the at least one employee to include in generating subscriptions for the publication (publication) to the list of subscriptions generated based on execution of the query (P0135).

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyjn because 1) a need exists for a new form of data change integration mechanism (Blankesteyjn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Removing excluded employees and adding included employees will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claim 28

26. Bracho, in view of Blankesteyjn, discloses the limitations above. Furthermore, Blankesteyjn discloses the following limitations:

bb. accessing a generation parameter (attributes) that indicates whether or not data sites (subscription for a store) should be generated when necessary (P0269);

cc. when the generation parameter that indicates that data sites should be generated when necessary, creating a data site (adding a store) and assigning the created data site to an employee that is included in the modified list of subscriptions and for which a data site has not been previously created (P0269).

27. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyjn because 1) a need exists for a new form of data change integration mechanism (Blankesteyjn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Creating a data site when generation is necessary will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claim 29

28. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Blankesteyn discloses the following limitations:

dd. deleting a subscription and corresponding assignments (purge) for the subscription that were generated during a first run of the subscription generator when a second run of the subscription generator indicates that the subscription and corresponding assignments for the subscription are no longer needed (discard irrelevant changes), the first run of the subscription generator occurring prior to the second run of the subscription generator (figure 20, P0017, 0046, 0139, 0141);

ee. triggering a replication process (publication) to distribute data to data sites (subscriber client applications) as indicated by subscriptions (P0044, 0046).

29. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyn because 1) a need exists for a new form of data change integration mechanism (Blankesteyn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Deleting subscriptions no longer needed will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claim 30

30. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Blankesteyn discloses the following limitations:

ff. accessing information for the subscription generator including the information associating the publication with the distribution criterion including the query comprises accessing information (attributes) for multiple subscription generators (P0269);

gg. executing, based on the accessed information for the subscription generator, the query against portions of the application data to generate a list of subscriptions for the publication associated with the subscription generator comprises:

Art Unit: 3621

- hh. determining whether each of the multiple subscription generators is to be run (P0269-0271);
- ii. identifying a subset (particular subscriber store) of the multiple subscription generators to be run based on the determination of whether each of the multiple subscription generators is to be run (P0267-0269);
- jj. generating a list of subscriptions for the publication by applying calculation logic to the application data for each subscription generator included in the subset of the multiple subscription generators (P0267-0269).

31. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyn because 1) a need exists for a new form of data change integration mechanism (Blankesteyn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Identifying a subset and generating a subscription based on said subset will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Claim 31

32. Bracho, in view of Blankesteyn, discloses the limitations above. Furthermore, Blankesteyn discloses the following limitations:

- kk. merging responsibility information (render a net change) for each subscription generator included in the subset of the multiple subscription generators to eliminate redundant subscriptions (only a single “net” change object) from the list of subscriptions for the publication generated by applying calculation logic to the application data for each subscription generator included in the subset of the multiple subscription generators (P0043, 0046, 0166-0167);
- ll. after the list of subscriptions has been generated, deactivating (unsubscribe function) at least one subscription generator included in the subset of the multiple subscription generators (P0283).

33. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bracho with Blankesteyn because 1) a need exists for a new form of data change integration mechanism (Blankesteyn P0013); and 2) only the appropriate subscribers should receive published events on the network (Bracho C2 L16-20). Merging information and deactivating subscriptions will help ensure only appropriate subscribers receive published events, and that data is exchanged properly.

Double Patenting

34. The provisional double patenting rejection is maintained from the previous office action. Please see below.

35. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

36. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

37. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 3621

38. Claims 1, 10, and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, and 15 of copending Application No. 10784196. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant application would have been obvious to one of ordinary skill in the art in light of the disclosure of application 10784196. Claims 1, 7, and 15 of application 10784196 are directed to accessing the type of data to be distributed and the distribution criterion, and generating data subscriptions based upon the type of data and the distribution criteria (see Application No. 10784196 claims 1, 7, and 15). Claims 1, 10, and 19 of the instant application are directed to receiving information from a user for use in generating data subscriptions with steps for the following: receiving data and a distribution criterion; storing distribution criteria and the type of data to be distributed; and for generating data subscriptions based on the type of data to be distributed. The instant application would have been obvious to one of ordinary skill in the art in light of claims 1, 7, and 15 of application 10784196 because if the data and distribution criterion can be accessed, then the person of ordinary skill would have received and stored this information in order to generate the data distribution.

39. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Interpretation

40. Examiner finds that because the examined claims recite neither “step for” nor “means for”, the examined claims fail Prong (A) as set forth in MPEP § 2181 I. Because all examined claims fail Prong (A), Examiner concludes that all examined claims do not invoke 35 U.S.C. 112, 6th paragraph. See also *Ex parte Miyazaki*, 89 USPQ2d 1207, 1215-16 (B.P.A.I. 2008) (precedential).

41. Should Applicant amend the claims to recite “means for”, Applicant is respectfully reminded that the specification must have proper antecedent basis for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1), MPEP § 608.01(o), and MPEP § 2181 IV.

42. After careful review of the original specification and unless expressly noted otherwise by Examiner, Examiner concludes that Applicant is not his own lexicographer. See MPEP § 2111.01 IV.

43. Examiner hereby adopts the following definitions under the broadest reasonable interpretation standard. In accordance with *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997), Examiner points to these other sources to support his interpretation of the claims. Additionally, these definitions are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

mm. **Microprocessor**: "[a] central processing unit (CPU) on a single chip." Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997.

44. Note that claims 10 and 19 recite "processor." Because Applicant's specification does not lexicographically define "processor", Examiner uses the broadest reasonable interpretation to define "processor" as hardware. Thus, Examiner interprets claims 10-15, 19, and 25-31 as requiring a hardware component; therefore, claims 10-15, 19, and 25-31 are not directed to software alone.

Response to Arguments

45. Applicant argues that Bracho and Cheng do not teach "based on accessed information for a subscription generator including information associating a publication... to the generated data subscriptions" as recited by amended claim 1 (amendment p 12). Examiner disagrees. Bracho teaches executing, based on the accessed information for the subscription generator, the query (expression string) against portions of the application data (incoming flow of events) to generate a list of subscriptions (list of subscriptions) for the publication (AdSource) associated with the subscription generator (C11 L23-52, C12 L30-45, C14 L58 – C15 L5). Regarding the other arguments, these are moot in light of the new art above.

Conclusion

46. Applicant's amendment filed on March 13, 2009 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

47. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

48. Because this application is now final, Applicant is reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an amendment after final rejection of claims is a matter of discretion." *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by Examiner. Unless stated otherwise by an express indication that a claim is "allowed," exemplary claim language provided by Examiner to overcome a particular rejection or to change claim interpretation has *not been addressed* with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112, 1st paragraph written description and enablement, §112, 2nd paragraph indefiniteness, and §102 and §103, prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

Art Unit: 3621

49. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to Chrystina Zelaskiewicz whose telephone number is 571.270.3940. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer can be reached at 571.272.6779.

50. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

/Chrystina Zelaskiewicz/
Examiner, Art Unit 3621
June 16, 2009

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685